App. Serial No. 10/567,172
Docket No.: US030276US2

In the Drawings:

Attached please find two drawing sheets, labeled Replacement Sheet 1/4 and Replacement Sheet 4/4. Labels have been added to Figs. 2 and 5. No new matter has been added.

Entry of these Drawing Sheets is respectfully requested.

Attachment: Two Drawing Sheets.

App. Serial No. 10/567,172
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In the Claims:

Please amend claims 1-8 as indicated below. This listing of claims replaces all prior versions.

1.   (Currently Amended) In a test apparatus used for measuring the input and output characteristics of an amplifier, a method for determining test program parameters, comprising:

calculating input loss from the test apparatus power source to the input of the amplifier, defining an input loss correction factor;

calculating output loss from the amplifier output to the power meter of the test apparatus, defining an output loss correction factor;

using the input loss correction factor to determine a real input power level; and

using the output loss correction factor to determine a real output level; and

in response to the determined real input power and real output power, performing at least one of

        correcting an input power level and applying the corrected input power level to the amplifier, and

        correcting an output level and outputting the output level to a user for analyzing the amplifier.

2.   (Currently Amended) The method of claim 1 further comprising,

calibrating radio frequency (RF) RF tests as a function of the input loss correction factor and the output loss correction factor and using the calibrated tests when applying the corrected input power level to the amplifier,

wherein the RF tests include at least one of the following: input power, output power, gain, efficiency, and detector error, linearity, and noise figure.

3.   (Currently Amended) A method for inserting calibrating factors into an automatic test equipment (ATE) ATE program to analyze a circuit, the method comprising:

a) obtaining parameters from at least one golden sample, wherein the parameters include lab gain, lab input power, and lab output power;

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b) programming parameters from the golden sample into ATE test program;

c) obtaining measurements on ATE for the golden sample, categorize the measurements into a lookup table;

d) calculating an uncorrected gain at small input signal for at least one small input signal value;

e) determining a first sum of a first input loss and a first output loss from the first sum determine a first gain change;

f) defining a first initial output loss

g) calculating an initial input loss from the difference of the first gain change and the first initial output loss;

h) setting power level of the ATE to sum of input power lab and initial input loss and applying a test signal to the circuit at the set power level;

i) measuring output power on the ATE wherein output power corresponds to an input power; and

j) calculating a corrected output power wherein the corrected output power is the sum of output power on the ATE and initial output loss, and outputting the corrected output power to analyze the circuit.

4.   (Currently Amended) The method of claim 3 wherein, the method further comprising[.]:

k). l) determining a degree of correlation between the corrected output power and lab output power, wherein the degree of correlation determines and using the determined degree of correlation to

inserting set corrected values into of the ATE test program for input power and output power to apply test inputs to the circuit or

defining define another initial output loss and, further including using the other initial output loss and performing steps g) through j) again.

5.   (Currently Amended) System A system for calibrating test program parameters for measuring the input and out characteristics of an amplifier, the system comprising:

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means for calculating input loss from the test apparatus power source to the input of the amplifier, defining an input loss correction factor;

means for calculating output loss from the amplifier output to the power meter of the test apparatus, defining an output loss correction factor;

means for using the input loss correction factor to determine a real input power level; and

means for using the output loss correction factor to determine a real output level; and

means, responsive to the determined real input power and real output power, for performing at least one of

correcting an input power level and applying the corrected input power level to the amplifier, and

correcting an output level and outputting the output level to a user for analyzing the amplifier.

6.   (Currently Amended) The system of claim 5 further comprising[,]:

means for calibrating radio frequency (RF) RF tests using the input loss correction factor and the output loss correction factor and for using the calibrated tests to apply a test input to the amplifier, wherein the RF tests include at least one of the following: output power, gain, efficiency, detector error, linearity, and noise figure.

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7.   (Currently Amended) Used in the measuring of input and output characteristics of an amplifier, machine readable medium, comprising:

a plurality of computer-executable instructions, which when executed by a computer, perform the steps of wherein the computer instructions include:

calculating input loss from the test apparatus power source to the input of the amplifier, defining an input loss correction factor;

calculating output loss from the amplifier output to the power meter of the test apparatus, defining an output loss correction factor;

using the input loss correction factor to determine a real input power level and;

using the output loss correction factor to determine a real output level;

calibrating radio frequency (RF) RF tests as a function of the input loss correction factor and the output loss correction factor, wherein the RF tests include at least one of the following: output power, gain, efficiency, and detector error, linearity, and noise figure; and

indicating to the user the calibrating of RF tests is complete; and

using the calibrated tests to apply test inputs to the amplifier.

8.   (Currently Amended) Used in the measuring of input and output characteristics of an amplifier, machine readable medium, comprising:

a plurality of computer-executable instructions, wherein the computer instructions include including steps for inserting calibrating factors into an automatic test equipment (ATE) ATE program for testing the amplifier, which when executed by a computer, perform the steps of the steps comprising:

a) obtaining parameters from at least one golden sample, wherein the parameters include lab gain, lab input power, and lab output power;

b) programming parameters from the golden sample into ATE test program;

c) obtaining measurements on the ATE for the golden sample, categorize and categorizing the measurements into a lookup table;

d) calculating an uncorrected gain at small input signal for at least one small input signal value;

e) determining a first sum of a first input loss and a first output loss from the first sum determine a first gain change;

f) defining a first initial output loss

g) calculating an initial input loss from the difference of the first gain change and the first initial output loss;

h) setting the power level of the ATE to the sum of the lab input power lab and initial input loss;

i) measuring output power on the ATE wherein output power corresponds to an input power; and

j) calculating a corrected output power, wherein the corrected output power is the sum of output power on the ATE and initial output loss; and

k) determining a degree of correlation between the corrected output power with the lab output power, and using wherein the degree of correlation determines to

inserting determine corrected values for insertion into the ATE test program for input power and output power, and further applying test inputs to the amplifier via the ATE test program with the inserted corrected values or

defining define another initial output loss and peforming further using the defined other initial output loss to perform steps g) through j) again.

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